

Nowhere does the Japanese publication refer to a welding joint. In the Abstract as well as in the description, it is always referred to as a mechanical junction or joint which is obtained by pressing, via the tool 2, material of the work piece 6 which has been plasticized by friction stirring in the direction B into the cavities 5a formed in the work piece 5 so that those cavities are filled and a form-locking connection is established.

This has nothing to do with welding. And this is made quite clear in the publication as the process is called by the persons skilled in the art ("artificer"). "Friction Stir Forming, FSF" (see page 3, line 17 - 21 of the translation), wherein the material of the work piece 6 is heated to a degree such that no high pressure is needed to press the plasticized material into the cavities 5a (page 3, lines 10 - 13).

"Welding" is generally understood as joining two work pieces by a metallurgical interaction between the two pieces, not simply by mechanically interlocking the work pieces.

In the method according to the present invention, the rotating tool 10 is moved with its projection (11) through the upper work piece until it contacts with its flat front end the lower work piece so as to produce, due to the friction of the pin-like projection, a gas-tight weld joint.

This is not achieved by the process disclosed in the cited reference, nor is it intended to be achieved. The friction generating surface area 2b of the tool 2, (pin) rather is rather maintained at a distance from the surface of the work piece 5 by the probe structure 2c of the pin 2, so that the flat bottom surface of the tool 2 does not come into contact with the workpiece 5 and no metallically clean surface is formed.

As a result, no weld in the sense of the term "welding" as understood in the art is obtained, and no gas tight joint is formed, but rather a mechanical form-locking connection is established as noted earlier:

Consequently, the process as disclosed in the cited reference does not anticipate the method as claimed in claim 1 of the present application and the Examiner is respectfully re-

quested to reconsider his rejection of claim 1 of the present application under 35 USC 102(a) as being anticipated by the cited reference.

Furthermore, since the reference actually resides in a different process, it is asserted that the method as defined in claim 1 cannot be considered to be obvious from the cited reference either.

Claims 2 to 8 and 10 define procedural steps, which are considered to be advantageous in connection with the method as defined in claim 1.

These claims are all directly or indirectly dependent on claim 1 and, consequently, include all the features of claim 1 so that they should be patentable already for that reason.

Reconsideration of claims 2 - 8 and 10 is respectfully requested and allowance of claims 1 - 8 and 10 is solicited

Respectfully submitted,



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